

From the
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THE FASTEST WAY TO USE LESS ENERGY AND SAVE MONEY ON YOUR
POWER BILL IS TO MAKE BETTER USE OF WHAT YOU ALREADY HAVE.

Low-Cost to No-Cost Energy Tips

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As most owners already know, one of the many benefits of an older house is that they were designed to interact with the local climate, but there are other equally simple tactics that all homeowners can use to lower the need for mechanical heat and air.



Shutters with closed system and with light coming through

TIPS FOR WARM WEATHER

Protect your windows – the simple solution is to stop the sun from coming inside a room.

◆ **Shutters** – These are the Cadillac of all solutions. Close them in the daytime.

The Good – Closed shutters stop sun from heating up your window glass by creating an insulation barrier between the shutter and the window sash (even the glass panes are cool to the touch). They allow filtered light into the room so you don't need to use light fixtures (saves more money there) while giving you privacy. Best of all, shutters work better and take less preparation than plywood over your windows during a storm.

The Downside – Shutters can be expensive if purchasing them for an entire house. Be creative — buy one at a time until the house is fully protected. Get them second hand in a salvage center that recycles original shutters and hardware. Shutters are a great, long-term investment with enormous resale value.

◆ **Thermal curtains** – These are an easy solution with immediate returns.

The Good – They are inexpensive, easy to put up and take down (you can tack them up temporarily if needed), and block up to 95 percent of the solar rays. If you already have traditional curtains or blinds, make sure these are closed in the daytime. They can keep up to 75 percent of the heat outside.

The Downside – Thermal curtains make a room very dark because they block out most of the sunlight, causing you to turn on a light switch. In addition, regular curtains do get warm to the touch, which causes heat transference into the room. There is a small amount of labor involved in using thermal curtains, as you have to put them up in the summer and take them down in the winter, when you actually do want the sunlight through your windows. They must fit tightly in the window, as any gaps will allow heat to come into the interior space.

◆ **Awnings** – This decorative solution provides shade.

The Good – Awnings block out direct sunlight while leaving a clear exterior view through the lower window sash.

The Downside – They do not keep the sunlight away from your bottom windowpanes, which causes your AC to use more energy. They do not protect windows in storms and are prone to being torn off along with your siding during high winds. Also, many architectural styles do not utilize awnings and if your house is in a New Orleans historic district, you will have to get the awnings approved by the Historic District Landmarks Commission.

◆ **Radiant barriers** – These reduce the amount of heat coming into your attic.

The Good – They block out the solar heat waves that come through your roof, drastically lowering the temperature in your attic in order to keep your living space cooler. Radiant barriers are very easy to install and are not very expensive.

The Downside – Dust accumulation can reduce effectiveness.



Radiant barrier panels in attic with closed system

TIPS FOR YEAR ROUND

◆ **Ceiling Fans** – These are the best all-around gadget in the house.

Summer – Use the fans to cool without lowering your thermostat. Tabletop or floor fans are also very effective at cooling.

Winter – Reverse your ceiling fans, as this will pull the warm air down from your ceilings to where it can keep you warm. Most fans have this feature.

◆ **Thermostat** – This controls the outflow of cash from your wallet.

Summer – Turn the thermostat to 80 degrees while you are gone, lowering it to 75 when you come home. The difference of five degrees is a huge savings. Additionally, when you use your fans, 75 degrees feels like 70, the perfect temperature for people, especially when you wear less clothing.

Winter – Use the reverse strategy, 65 degrees when you are gone and 70 degrees when you return. Remember, when you are cold, put a sweater on your body and slippers on your feet. This personal insulation costs nothing and your energy bill will be lower.

Spring and Fall – Turn your system off on good days and use the nice weather outside to make your interior space comfortable. If you are worried about bugs, use screens on your windows.

◆ **Electrical outlets** – These go directly into your wall cavity, and if there are any gaps around the faceplate, your interior air will slip away. Insulate around the outlet with soft insulation.

◆ **Plumbing, HVAC vents, etc.** – Any opening that comes through your Sheetrock or your floor has the same issues as the electrical outlets. Insulate all gaps with soft insulation.

TIPS FOR MILD WEATHER

- ◆ Operable shutters, windows and transoms – These are amazing energy savers when combined together.

Spring – Rotate the louvers so that the sun comes inside and warms your house. If it is a warm day, open the windows and turn off the heater. With the shutter doors closed, you have security as well as fresh air.

Fall – Rotate your louvers so that sun does not come into the house, keeping the interior cool while allowing daylight in. Open all the transoms above the doors to allow the hot air to go out of your building. Lowering the top window sash will also let the heat out of your room and opening the bottom sash behind the shutters allows cool air in. This strategy is most effective when you have two or more windows open within your home as it allows a breeze to move through.



Transom/window/shutter combination

TRADITIONAL BUILDING METHODS OF MANY HISTORIC HOMES ARE INNATE RESPONSE TO HOT CLIMATE

- ◆ Houses raised on piers create a cooling effect under the house in the summer. Make sure that you don't block the air flow by closing in your pier system.
- ◆ Shade trees are a great landscape strategy to keep solar rays from heating your roof and walls.
- ◆ High ceilings allow the hot air to rise away from the space you live in, thus keeping you cooler.
- ◆ Ventilated attics encourage hot air entering through your roof material to move out of your attic space. Make sure that both the intake and the outtake vents are not blocked.
- ◆ Thick masonry walls slow down the transference of heat from the outside, resulting in a naturally cooler interior.
- ◆ A porch keeps the direct sun from entering adjacent windows.

TIPS FOR WINTER

Insulate your building envelope – stop your warm air from escaping.

◆ **Ceilings** – Because warm air rises you want to keep it inside by insulating the ceiling from the attic space. It can be a Do-It-Yourself project for those who are handy. Install the insulation between the ceiling joists. If you want your attic to be warm, then you want to put insulation between the roof rafters as well. (See *"To Insulate or Not to Insulate: Making the Best Choices for Historic Buildings in a Tropical and Wet Climate"* in the March 2009 issue of *Preservation in Print*.)

◆ **Windows** – To stop any cold air coming around your window sashes, weather stripping is a fairly inexpensive option. This will also keep your cold air in during the summer. A second strategy is to have a thick curtain that is closed at night to keep out chilly air transferred through the windowpanes. If your climate has a cold winter, install compression-fit, internal storm windows during the cold months with a nice 6-inch gap between the storm and the original window. You can easily remove these in the spring when warm weather arrives.

◆ **Doors** – Like the windows, you need to make sure that there are no gaps around the door and the framing. The area where the door meets the floor is a common area of leakage that is seldom noticed. Like the windows, weather stripping this area can be easy to do.

◆ **Shutters** – Don't forget to use your shutters in the winter. On windy days they can keep the cold breeze from your window glass; and by closing them at night, they provide an insulating air-gap.

All these strategies will help in different seasons to lower your energy costs, and each will, in return, pay off the investment made by adding them to your house. Once these simple systems are in place, it costs nothing more for them to work with your house and positively impact its interior temperature. Remember, the more energy you personally put into interacting with your home, the less energy your power company has to provide — which directly translates into more money in your pocket, or better yet, less money going out of your vacation fund.

